# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

## FIELD BORDER

(Ft.) CODE 386

## **DEFINITION**

A strip of permanent vegetation established at the edge of or around the perimeter of a field.

## **PURPOSES**

- Reduce erosion from water
- Soil and water quality protection
- Provide wildlife food and cover
- Manage harmful insect populations
- Serve as turn rows for farm machinery

## CONDITIONS WHERE PRACTICE APPLIES

At the edges of cropland fields and to connect other buffer practices within the field. Field borders may also apply to recreation land or other land uses where agronomic crops are grown.

#### **CRITERIA**

## General Criteria Applicable to All Purposes

Minimum field border width will be 20 feet. To accommodate large farm equipment, widths may be increased to 35 feet.

Field borders may be allowed to establish by natural regeneration provided a seed source is close by and a minimum of 75 percent ground cover is achieved by the end of the first growing season. Field borders may also be established to adapted plant species of perennial grass or a combination of perennial grasses and legumes and/or shrubs. Recommended species are listed in Table 1. Seedbed preparation and planting shall be carried out in accordance with the conservation practice standard, Conservation Cover (330).

All ephemeral gullies and rills present in the planned field border will be smoothed during seedbed preparation.

## Additional Criteria To Reduce Erosion From Water

Locate borders around the entire perimeter of the field, or as a minimum, install borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.

# Additional Criteria to Protect Soil and Water Quality

To reduce runoff and/or increase infiltration field borders should be located around the entire perimeter of the field. Field borders widths will be designed to conform to minimum field application setback distances established by state or local regulations for manure and/or chemical application. Refer to the Agricultural Waste Land Application Guidelines in the conservation practice standard Waste Utilization (633) for setback distances for manure and other organic by-products. Consult the Environmental Hazards Section of pesticide labels for setback distances regarding agrichemicals/pesticides.

To improve sediment trapping efficiency, locate borders around the entire perimeter of the field, or as a minimum, in areas where runoff enters or exits a field.

Border widths shall be designed to accommodate farm equipment parking, loading/unloading operations, harvest operations, module storage, etc. Field borders may be increased to 35 feet in width to accommodate these purposes.

# <u>Additional Criteria For Management of Harmful</u> Insect Populations

Field borders may be used to manage harmful insect populations in two ways.

Borders may be established to plant species which attract beneficial insects. Mowing, harvesting, and pesticide applications shall be scheduled to accommodate life cycles of targeted beneficial species.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Borders may also be established to plant species which congregate harmful insects into a small area (trap crop) where they can be controlled through cultural mechanical, and/or chemical means without treating the entire field acreage.

# Additional Criteria to Provide Wildlife Food and Cover

When one of the stated purposes of a field border is for enhancing wildlife habitat, the border may be wider than 20 – 35 feet in designated areas. When wider field borders are established for wildlife, the total width may be from 1 to 3 chains (66 – 198 ft). Targeted wildlife species will determine additional width and plant species established for wildlife. The portion of the field border managed for wildlife will be planned and applied in accordance with the conservation practice standard Upland Wildlife Habitat Management (645).

## Example:

A producer wants to establish a field border which will accommodate large farm equipment including 4-row cotton pickers and a module builder and serve as a storage location for cotton modules. The producer also wants to improve quail habitat on his property. The field border could be planned for a 35-foot area adjacent to the cropland field planted to common bermudagrass to serve as the turn row. An additional 31 feet could be established to bicolor lespedeza to furnish food and cover for quail. The area established for quail habitat would be managed according to practice code 645.

## **CONSIDERATIONS**

Field borders are more effective and provide greater environmental benefits when established around the entire field.

To increase sediment trapping efficiency, consider establishing a narrow strip (3-5 feet) of a stiff-stemmed grass (switchgrass) along the cropland/field border interface.

Use native species, where feasible, to meet producer objectives.

Consider overseeding or sod seeding field borders with small grains and/or legumes for winter cover and to enhance wildlife benefits.

Rows of shurbs in the field border outside of the turn row area will enhance the field borders ability to harbor beneficial insects and provide additional wildlife benefits.

Install waterbars or berms if needed to breakup or redirect concentrated flow within the border.

If practice installation and maintenance has the potential to affect cultural resources, follow NRCS state policy regarding cultural resources.

### PLANS AND SPECIFICATIONS

Specifications for the establishment of the practice shall be prepared for each field according to the criteria, considerations, and other conservation practices referred to in this standard. Specifications shall be recorded using appropriate worksheets and narrative statements in the conservation plan. Use the LA-CPA-10 (Rev. 3/98), LA-CPA-33A (Rev. 9/99), and/or the LA-CPA-33B (Rev. 9/99) as appropriate to document vegetative cover establishment. The following items should be included in the conservation plan:

- Border widths and length
- Location within the field or farm boundary
- Vegetation to be established
- Seedbed preparation
- Planting method
- Lime and fertilizer requirement
- Operation and maintenance

## OPERATION AND MAINTENANCE

Field borders require careful management and maintenance for performance and longevity. The following maintenance activities shall be planned and applied as needed:

- Storm damage repair
- Sediment Removal when six (6) inches of sediment has accumulated at the field border/cropland interface
- Shut off sprayers and raise tillage equipment to avoid damage to field borders
- Shape and re-seed border areas damaged by chemicals, tillage, or equipment traffic

- Fertilize, mow, and control noxious weeds to maintain plant vigor
- Repair gullies and rills by filling and reseeding
- Restrict maintenance activities on field borders or portions of field borders established for wildlife from April 15 – July 15 which coincides with the primary nesting season for most species of ground-nesting birds in Louisiana.

TABLE 1 – RECOMMENDED PLANT SPECIES FOR FIELD BORDERS 1/

SPECIES	SEEDING RATE LBS/ACRE	SEEDING DATES
Perennial Grasses		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		September 1 – July 1 (N. LA)
Bahiagrass	30 lbs	September 1 – August 1 (S. LA)
		March 15 – July 1 (N. LA)
Common Bermudagrass (Hulled)	5 lbs	March 1 – August 1 (S. LA)
		March 15 – July 1 (N. LA)
Dallisgrass	7 lbs PLS	March 1 – July 1 (S. LA)
Tall Fescue	30 lbs	September 1 – November 15
Weeping lovegrass	3 lbs	March 1 – July 1
Switchgrass (outer edge only)	6 lbs PLS	March 1 – May 30
Perennial or Reseeding		
Annual Legumes <sup>2/</sup>		
Serecia lespedeza	30 lbs	March 1 – June 1
Arrowleaf Clover	10 lbs	October 1 – November 15
Crimson Clover	25 lbs	September 15 – November 15
Red Clover	15 lbs	September 15 – November 15
Subterranean Clover	15 lbs	October 1 – November 15
White or Ladino Clover	5 lbs	October 1 – November 15
Hairy Vetch	30 lbs	September 1 – November 15
Singletary Peas (non-scarified)	50 - 60  lbs	September 15 – November 15
(scarified)	35 - 40  lbs	September 15 – November 15
Common lespedeza	25 - 30  lbs	February 15 – March 15
Kobe lespedeza	35 - 40  lbs	February 15 – March 15
Recommended Combinations 3/		
Bahiagrass and Common lespedeza		
Tall Fescue and White or Ladino		
Clover		
Tall Fescue and Red Clover		
Bahiagrass and Crimson Clover		
Tall Fescue and Hairy Vetch		
Dallisgrass and White or Ladino		
Clover		
Dallisgrass and Red Clover		

Field borders shall be composed of perennial grasses or a combination of perennial grasses and legumes and/or shrubs. For field borders where wildlife is a concern, refer to the conservation practice standard Upland Wildlife Habitat Management (645) for recommended plant species, seeding rate, and seeding dates for establishing cover beneficial to the targeted wildlife species.

<sup>&</sup>lt;sup>2</sup> All legume seed shall be inoculated with the proper strain of Rhizobia bacteria.

When seeding cool season legumes with warm season perennial grasses, plant the warm season perennial grasses first, then sod seed or over seed cool season legumes using the full planting rate for each species. Where seeding combinations simultaneously, the seeding rate of each species may be reduced by 25%.